UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/573,900	03/29/2006	Thomas Coquerelle	OT-5229	2068	
Lisa A Bongiov	7590 07/14/200 v <b>1</b>	EXAMINER			
Otis Elevator C	ompany	PICO, ERIC E			
10 Farm Spring Famington, CT 06032			ART UNIT	PAPER NUMBER	
<b>C</b> ,				3654	
			MAIL DATE	DELIVERY MODE	
			07/14/2008	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)			
	10/573,900	COQUERELLE ET AL.			
Office Action Summary	Examiner	Art Unit			
	ERIC PICO	3654			
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).					
Status					
1) Responsive to communication(s) filed on					
	-· action is non-final.				
<i>;</i> —	<del>-</del>				
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
ologod in addordance with the practice and c	A parte gaayie, 1000 G.B. 11, 10	0.0.210.			
Disposition of Claims					
<ul> <li>4) ☐ Claim(s) 1-12 is/are pending in the application.</li> <li>4a) Of the above claim(s) is/are withdrawn from consideration.</li> <li>5) ☐ Claim(s) is/are allowed.</li> <li>6) ☐ Claim(s) 1-12 is/are rejected.</li> <li>7) ☐ Claim(s) is/are objected to.</li> <li>8) ☐ Claim(s) are subject to restriction and/or election requirement.</li> </ul>					
Application Papers					
<ul> <li>9) ☐ The specification is objected to by the Examiner.</li> <li>10) ☑ The drawing(s) filed on 29 March 2006 is/are: a) ☐ accepted or b) ☑ objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).</li> <li>11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.</li> </ul>					
Priority under 35 U.S.C. § 119					
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>					
Attachment(s)    Notice of References Cited (PTO-892)					

## **DETAILED ACTION**

## **Drawings**

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the packing material protecting any metal/metal impact claimed in claim 8 and a second electric contact claimed in claim 21 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Art Unit: 3654

## Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claim(s) 1-4, 9, and 10 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over Giles U.S. Patent No. 483145 in view of Tanner U.S. Patent No. 1252737.
- 4. **Regarding claim 1 and 10**, Giles discloses a safety device for elevators having no machine room, the device comprising:
- 5. an upper median crosspiece, shown as the bottom of car H, forming part of a support arcade; and
- 6. at least two rigid rods F mounted sliding on the crosspiece and arranged symmetrically with respect to a median traction plane,
- 7. wherein the at least two rigid rods F are adapted to move in an active outgoing position projecting from the crosspiece so as to come opposite and simultaneously in contact with a corresponding stop, Column 3, Line 29, fixed at an adequate height on a guide rail G, and the at least two rigid rods F are adapted to move in an inactive incoming position so as to be out of range of the stop, the inactive incoming position corresponding to a normal operating mode of the elevator, active outgoing position

Art Unit: 3654

corresponding to a maintenance or inspection mode of the elevator, Column 3, Lines 17-44.

- 8. Giles is silent concerning a safety device for elevators having flexible tension member being rope.
- 9. Tanner teaches a safety device for elevators having no machine room and flexible tension member 5 being ropes, the device comprising:
- 10. an upper median crosspiece 4 forming part of a support arcade; and
- 11. at least two rigid rods 6 mounted sliding on the crosspiece and arranged symmetrically with respect to a median traction plane,
- 12. wherein the at least two rigid rods 6 are adapted to move in an active outgoing position projecting from the crosspiece 4 so as to come opposite and simultaneously in contact with a corresponding guide rail 12, and the at least two rigid rods 6 are adapted to move in an inactive incoming position so as to be out of range of the stop, the inactive incoming position corresponding to a normal operating mode of the elevator, active outgoing position corresponding to a maintenance or inspection mode of the elevator.
- 13. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide a flexible member being rope as taught by Tanner to the elevator car disclosed by Giles to facilitate the lifting of the elevator car.
- 14. **Regarding claim 2**, Giles discloses wherein the at least two rigid rods F are mounted sliding in relation to each other on a trolley E which is mounted sliding under the upper crosspiece.

Application/Control Number: 10/573,900

Art Unit: 3654

15. **Regarding claim 3**, Giles discloses wherein the trolley E is equipped with a control lever A which allows the maneuvering of rods F in either an outgoing or incoming position, the control lever A can be locked by a dog clutch device or similar device.

Page 5

- 16. **Regarding claim 4**, Giles discloses wherein each of the rods F receives a spring element F<sup>3</sup> that is arranged to keep the rods in the outgoing position once they have been freed from the incoming position.
- 17. **Regarding claim 9**, Giles discloses wherein the stop is placed on the car guide rail at a height.
- 18. Giles is silent concerning wherein the stop is placed on the car guide rail at a height to provide a minimum safety height of more than 180 cm.
- 19. It would have been obvious to one of ordinary in the art at the time of the invention was made to place the stop at a height to provide a minimum safety height of more than 180 cm, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ (CCPA 1980).
- 20. Claim(s) 5 and 12 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over Giles U.S. Patent No. 483145 in view of Tanner U.S. Patent No. 1252737 as applied to claim 1 above, and further in view of Chatham U.S. Patent No. 5773771.
- 21. **Regarding claim 5 and 12**, Giles is silent concerning a first electric contact placed in series with a first control switch that authorizes functioning of the inspection or maintenance mode, the electric contact is configured to be triggered when the at least

two rigid rods are in the outgoing position, the electric contact closes the elevator functioning control circuit; and

22. a second electric contact that is configured to stop the elevator car and arranged at a position so as to stop the elevator car before the at least two rigid rods impact the stop.

Page 6

- 23. Chatham teaches a first electric contact 69c, 69d placed in series with a first control switch 68a, 68b that authorizes functioning of the inspection or maintenance mode 51, the electric contact is configured to be triggered when the at least two rigid rods are in the outgoing position, the electric contact closes the elevator functioning control circuit 50; and
- 24. a second electric 71 contact that is configured to stop the elevator car and arranged at a position so as to stop the elevator car before the at least two rigid rods impact the stop.
- 25. It would have been obvious to one of ordinary skill in the art at the time of the invention to place a first and second electric contact as taught by Chatham to the safety device disclosed by Giles to facilitate the operation of the elevator car.
- 26. Claim(s) 6 and 7 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over Giles U.S. Patent No. 483145 in view of Tanner U.S. Patent No. 1252737 as applied to claim 1 above, and further in view of Becker U.S. Patent No. 1773163.
- 27. Regarding claim 6, Giles is silent concerning the stop is a metal flat bar secured by bolts to a rear wall of the guide rail and cut with two symmetrically square folds with

respect to a longitudinal plane of the rail, these folds each being arranged to receive the rod to stop the rods simultaneously.

- 28. Becker teaches wherein a stop 39 is a metal flat bar secured by bolts 40 to a rear wall of a guide rail 9 and cut with two symmetrically square folds with respect to a longitudinal plane of the rail 9, these folds each being arranged to receive a rod 27 to stop the rods 27 simultaneously.
- 29. It would have been obvious to one of ordinary skill in the art at the time of the invention to secure the stop disclosed by Giles by bolts to a rear wall of the guide rail and cut with two symmetrically square folds with respect to a longitudinal plane of the rail as taught by Becker to improve adjustment of the stops.
- 30. **Regarding claim 7**, Giles is silent concerning wherein the stop is an angle steel fixed by a clip rigidly tightened to the rail.
- 31. Becker teaches wherein the stop 39 is an angle steel fixed by a clip 40 rigidly tightened to the rail 9.
- 32. It would have been obvious to one of ordinary skill in the art at the time of the invention to fix the stop disclosed by Giles by a clip rigidly tightened to the rail as taught by Beckerto improve adjustment of the stops.
- 33. Claim(s) 8 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over Giles U.S. Patent No. 483145 in view of Tanner U.S. Patent No. 1252737 as applied to claim 1 above, and further in view of Koppensteiner U.S. Patent No. 4512444.
- 34. **Regarding claim 8**, Giles is silent concerning wherein the stop comprises packing material protecting any metal/metal impact.

Art Unit: 3654

35. Koppensteiner teaches wherein a stop 1 comprises packing material 4 protecting any metal/metal impact.

- 36. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the stop disclosed by Giles with packing material as taught by Koppensteiner to reduce vibration and protect the stop.
- 37. Claim(s) 11 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over Giles U.S. Patent No. 483145 in view of Tanner U.S. Patent No. 1252737 as applied to claim 1 above, and further in view of Jones et al. U.S. Patent No. 6305499.
- 38. **Regarding claim 11**, Giles is silent concerning wherein the flexible tension members are belts.
- 39. Jones et al. teaches wherein a flexible tension members 212, 214 are belts.
- 40. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the elevator car disclosed by Giles with a flexible tension members being belts as taught by Jones et al. to facilitate the lifting of the elevator car.

## Conclusion

41. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Perri U.S. Patent No. 764762, Thornber U.S. Patent No. 846807, Cooney U.S. Patent No. 5771995, Rau et al. U.S. Patent No. 311783, Hayrinen U.S. Patent No. 5411117.

Art Unit: 3654

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Pico whose telephone number is 571-272-5589.

The examiner can normally be reached on 6:30AM - 3:00PM M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Cuomo can be reached on 571-272-6856. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

EEP
/Peter M. Cuomo/
Supervisory Patent Examiner, Art Unit 3654